JUNLIN LEATHER

QinHuang Electric Creaser

User Manual V2.3

(Hardware R4.62 · Software V2.1)

1. Quick Start

1.1 Safety highlights

- Do not connect the DC jack and USB Type-C port at the same time.
- When connecting the creaser to a computer via USB, unplug the DC plug from the DC jack first.
- Use only reliable, certified USB-C cables and power adapters / PD chargers.
- Do not use the creaser in humid, high-temperature, flammable, or explosive environments.
- Do not cover the main unit or block its ventilation; allow heat to dissipate freely.
- Disconnect power if the device will not be used for a long time or is left unattended.
- Do not disassemble the unit yourself. Internal springs and steel balls may be damaged and safety cannot be guaranteed.

1.2 Connect power

Choose one input method:

- DC jack input

  Input: 24 V DC, 60 W; 5525 barrel connector.

- USB Type-C PD input (recommended)

  From a PD fast-charging adapter or power bank. Recommended: 20 V, 3 A or higher (60 W+), with a 3 A or higher USB-C cable.
  USB-C PD is the preferred way to power the QinHuang Electric Creaser. It is flexible and works with many modern chargers and power banks.

Warning: Never connect the DC jack and USB-C port at the same time. If you connect the creaser to a computer via USB, unplug the DC plug first.

1.3 Make your first crease (Power Mode)

1. Prepare scrap leather similar to your project and install a suitable creasing tip in the handle, then connect the handle to the output connector.

2. Rotate the knob to highlight the lightning icon and short press to enter Power Mode.

3. Rotate the knob to set a starting power level (for example 20–35% for thin veg-tan, 35–50% for general use).

4. Short press the knob to start heating; the heating icon appears and the blue LED is solid.

5. Test on scrap leather and adjust the power level or your speed until the crease looks right.

6. Short press again to stop heating and allow the tip to cool before changing tips or moving the handle.

1.4 Main menu tiles

The main menu uses tiles with icons. The exact graphics are shown on the device; the table below summarises their roles.

Icon	Meaning
Lightning icon	Power Mode – percentage-based output for normal leathercraft creasing (recommended).
Thermometer icon	Temperature Control Mode – closed-loop temperature control when using compatible temperature-sensing handles.

Electroplating beaker icon	Electroplating Mode – constant-voltage output for electrochemical work (advanced, optional).
Moon icon	Sleep Mode – puts the device into sleep immediately; long press the knob to wake.
Gear icon	System Settings – change screen, sound, animation and button timing behaviour, and view About information.

2. Product Tour

2.1 Front view – controls and indicators

Use this section together with a labelled front-view picture of the main unit.

- Display – high-contrast digital display showing menus, power level, temperature, alarms, and settings.
- Rotary knob – rotate to move between items or change values; short press to confirm or start/stop; long press to go back or wake; double-click to open the Quick Menu (presets).
- Blue status LED – blinks in standby; solid when output is active.
- Red alarm LED – lights when a fault is active and the buzzer sounds.

2.2 Rear view – ports and mounting

- DC 24 V input jack (5525) – for 24 V DC / 60 W power input.
- USB Type-C PD port – for PD power or DFU / config access when connected to a computer.
- Mounting / stacking points – used with the connector back plate to stack multiple main units and/or the Aluminum Creasing Tip Rack.

2.3 Specifications

Item	Specification
Model name	QinHuang Electric Creaser
Control	32-bit microcontroller, digital control
Display	High-contrast digital display
Input (DC jack)	24 V DC, 60 W, 5525 barrel connector
Input (USB-C PD)	PD 20 V / 3 A or higher (60 W+ recommended)

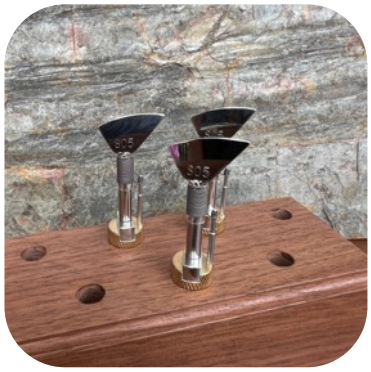
Maximum output	17 V DC, 51 W
Weight	375 g (main unit only, without accessories)
Dimensions (L × W × H)	approx. 104 × 104 × 24 mm
Auto sleep	After 120 min of inactivity (adjustable via Sleep T)
Presets	Up to 26 quick presets (A–Z) via config.txt
Firmware update	DFU mode via USB (X-POWER drive)
Certifications	CE, FCC, KC, RoHS (details in Section 7)
Patent (China, factual only)	ZL 2024 3 0401495.3

2.4 Accessories overview

Use these placeholders to show the main unit, handles, tips, and the Aluminum Creasing Tip Rack.

Accessories – main unit with handle

Accessories – creasing tips



Accessories – Aluminum Creasing Tip Rack

3. Using the Creaser

3.1 Power Mode (recommended for leathercraft)

To enter Power Mode, rotate the knob to select the lightning icon and short press.

The main value on screen is a power percentage (0–100). This represents the output level, not a fixed temperature.

Rotate the knob to adjust the percentage. Short press to start or stop heating. You can change the power level while heating or while stopped.

Suggested power ranges for leathercraft:

Power range	Typical usage
0–20%	Very thin leather, test scraps, gentle warming.
20–35%	We recommend staying here got general creasing. Lower for chrome tanned, higher for veg tanned
35–50%	Can't think of anything to say
50–65%	Can't think of anything to say
65–80%	We recommend turning to this setting for smoothing edge paint
80–100%	Red Hot Coil Range, use this if you want to be a pyromancer

In Power Mode, **double-click** the knob to open the Quick Menu. A list of preset names A–Z is shown. Select a preset and short press to apply its power percentage immediately. Up to 26 presets can be defined in config.txt.

3.2 Temperature Control Mode (optional)

To enter Temperature Control Mode, rotate the knob to select the thermometer icon and short press.

PV (Process Value) shows the current measured tip temperature; SV (Set Value) is the target temperature.

Rotate the knob to adjust SV. Short press to start or stop heating.

Double-clicking the knob in this mode also brings up the same presets from config.txt (A–Z).

JunLinLeather is still working on a temperature-sensing creasing system that we are fully satisfied with as a complete interchangeable ecosystem. Because of this, we currently focus on Power Mode for normal leathercraft work.

If you mostly use Power Mode, you can safely ignore the temperature value in each preset – the third number does not affect behaviour in Power Mode.

3.3 Electroplating Mode (advanced)

Electroplating Mode is intended for low-voltage electrochemical work and is not required for normal leathercraft use.

1. Rotate the knob to select the electroplating beaker icon and short press to enter.
2. Rotate the knob to set the output voltage.
3. Short press to start output; the display shows the icon and output current.
4. Short press again to stop.
5. Long press the knob to return to the main menu.

4. System Behaviour

4.1 Sleep and wake

If there is no operation for 120 minutes, the device automatically stops output and turns off the display (sleep mode).

Long press the knob to wake the device and return to the main screen.

The sleep time can be adjusted in System Settings → Sleep T.

4.2 System Settings – overview

The System Settings menu (gear icon) lets you tailor how the creaser looks and feels. Settings can be grouped conceptually into Screen & Sound, Animation & Feel, and Button Timing & Controls.

4.3 System Settings – descriptions

Setting	Description	Default
Disp Bri	Display brightness. Higher values make the screen brighter.	50
Buzz Vol	Buzzer volume for key presses and alarms.	50
Dark Mode	Enables a dark-background style on the screen when ON.	OFF
Tile Ani	Animation strength for tile-style menus. Higher value = more motion.	MID
List Ani	Animation strength for list-style menus.	MID
Win Ani	Animation strength when pop-up windows appear or close.	MID
Spot Ani	Animation strength for selection highlights / spot effects.	MID
Tag Ani	Animation behaviour for labels / tags.	MID
Fade Ani	Fade-in / fade-out effect strength for transitions.	MID
T Ufd Fm Scr	When ON, tile menu animations start from the first icon when entering a tile menu.	ON
L Ufd Fm Scr	When ON, list menu animations start from the top item when entering a list.	ON
T Loop Mode	When ON, scrolling past the last tile loops back to the first.	OFF
L Loop Mode	When ON, scrolling past the bottom of a list loops back to the top.	OFF
Win Bokeh Bg	When ON, blurs the background when a pop-up window appears.	OFF

Knob Rot Dir	Reverses the knob rotation direction if it feels backwards.	CW
Btn SPT	Short-press time: how quickly a short press is recognized. Smaller value = more sensitive.	150 ms
Btn DPT	Double-click time: maximum interval between two presses to register as a double-click.	250 ms
Btn LPT	Long-press time: how long the knob must be held down to register as a long press.	800 ms
Sleep T	Auto-sleep time in minutes. After this time with no operation, the device sleeps.	120
About	Read-only screen with model name, software version, hardware version and serial number.	—

5. Presets & Firmware

5.1 DFU firmware upgrade

1. Confirm and note your current hardware and software versions (System Settings → About).
2. Unplug the DC power cable from the DC jack.
3. Press and hold the knob, then connect the device to a computer using a USB-C cable.
4. When a USB drive named X-POWER appears on the computer, release the knob.
5. Back up the existing firmware file (firmware) from the X-POWER drive to your computer.
6. Copy the new firmware file (firmware) into the X-POWER drive, replacing the old file.
7. Safely eject the X-POWER drive and disconnect the USB-C cable.
8. Power the creaser on again.
9. Check the About screen to confirm that the software version has been updated.

5.2 config.txt presets

The QinHuang Electric Creaser can store up to 26 quick presets (A–Z). Presets can be recalled by double-clicking the knob in Power Mode or Temperature Control Mode.

All presets are stored in a text file named config.txt located in the X-POWER drive.

Field	Description	Example
Name	Preset name shown on the screen. Recommended maximum length: 8 characters (longer names may be truncated).	"Setting 1"
PowerPercent	Power percentage (0–100) used in Power Mode.	20
Temperature	Temperature setpoint (SV) used in Temperature Control Mode. If you only use Power Mode, this value does not matter for operation.	250

Format and example presets:

```
config_A:["Name",PowerPercent,Temperature]
...
config_Z:["Name",PowerPercent,Temperature]

config_A:["Setting 1",20,250]
config_B:["Setting 2",25,280]
config_C:["Setting 3",30,150]
config_D:["Setting 4",45,110]
config_E:["Setting 5",60,150]
config_F:["Setting 6",80,130]
config_G:["Setting 7",100,350]
```

Use a plain-text editor (UTF-8). Only change the Name and the two numbers. Do not modify brackets, commas, or other punctuation. Save config.txt, safely eject X-POWER, and restart the creaser.

6. Troubleshooting & Alarms

6.1 General alarm behaviour

When a fault is detected, the display shows an alarm code, the red LED lights, and the buzzer sounds.

After resolving the cause, short press the knob to clear the alarm, then short press again to resume normal operation.

6.2 Alarm codes

Code	Cause	Recommended action
UVP	Input undervoltage.	Use a DC supply with sufficient voltage (around 24 V), or a PD charger rated 20 V / 3 A (60 W) or higher with a 3 A+ USB-C cable.
OVP	Input overvoltage.	Confirm that the DC power source does not exceed 24 V.
OCP	Output overcurrent or short circuit.	Check the handle, cable, and tip for accidental contact or internal short. Remove the fault, then clear the alarm and try again.
OTP	System over-temperature.	Ensure that the main unit has good ventilation and is not covered. Allow it to cool before continuing work.
TNC	Temperature handle not connected.	If using a temperature-sensing handle, confirm that it is fully inserted and locked.
TGS	Thermocouple short-circuit.	The sensor in the temperature handle is shorted. Stop using the handle and arrange for inspection or service.
TOC	Thermocouple open-circuit.	The sensor in the temperature handle is broken or disconnected. Stop using the handle and arrange for inspection or service.
TSS	Thermocouple shorted to positive output.	The sensor is shorted to the output. Stop using the handle immediately and arrange for inspection or service before using Temperature Control Mode again.

7. Certifications & Legal

7.1 Certifications

Item	Reference
CE certification	HTT202402188E
FCC certification	HTT202402188F
KC certification	R-R-jD1-X-power
RoHS certification	HTT202402188R
Patent (China)	ZL 2024 3 0401495.3

7.2 Usage & responsibility

The QinHuang Electric Creaser is designed for professional and hobby leathercraft and light electro-work. Always follow the safety instructions in this manual and observe local electrical regulations.

JunLinLeather and the original manufacturer are not responsible for damage or injury resulting from misuse, unauthorized modification, or operation in unsafe environments.